

March 6, 2008

Via Electronic and Overnight Mail

Ms. Ana Morales Clerk of the Board Yolo County Board of Supervisors 625 Court Street, Room 204 Woodland, CA 95695-1268

Re: Revised Old Sugar Mill Specific Plan and EIR Addendum (Scheduled for Consideration by Yolo County Board of Supervisors on March 11, 2008)

Dear Ms. Morales, Chair and Members of the Board of Supervisors:

We are writing on behalf of the Natural Resources Defense Council ("NRDC") to express its concerns regarding the revised Old Sugar Mill Project, proposed for construction near Clarksburg. NRDC is a non-profit organization with more than 525,000 members nationwide, including many who live and work in and around the Delta. NRDC has long devoted considerable attention to the protection and restoration of the Delta. While NRDC does not typically become involved in local land use matters, this proposal raises significant issues with broad policy implications regarding the wisdom of building new residential development in vulnerable Delta floodplains, demanding NRDC's attention.

As the Board of Supervisors is well aware, NRDC argued – and the Delta Protection Commission ("DPC") concluded – that construction of the Old Sugar Mill Project as originally proposed would have exposed the public to substantial risk from catastrophic flooding, rendering the project inconsistent with the Delta Protection Act and the Land Use and Resource Management Plan for the Primary Zone of the Delta (the "Delta Plan"). The minimal changes incorporated into the revised Project do not begin to address the concerns of either NRDC or the DPC. In addition, NRDC remains concerned that the environmental review that has been prepared for the Old Sugar Mill Project fails entirely to consider – let alone address – the fact that Delta flood events are becoming more frequent and severe due to global warming. NRDC strongly urges the Board not to approve the Old Sugar Mill Project as it is currently proposed.

I. Background

The Old Sugar Mill Project is a mixed-use residential development that would be built north of Clarksburg on a 105-acre parcel in the Delta Primary Zone. The parcel is adjacent to the Sacramento River and directly behind an agricultural levee composed of coarse, sandy soils dredged from the river channel nearly a century ago. The surrounding area to the north and west consists of farmland and vineyards. If built, the Old Sugar Mill Project would be the first urban

residential development in the Primary Zone of the Delta since passage of the Delta Protection Act in 1992.

On October 24, 2006, the Board of Supervisors approved the initial version of the Old Sugar Mill Project, which included 162 residential units. Pursuant to the Delta Protection Act, Pub. Res. Code § 29770(a), NRDC appealed the Board's approval of the Project to the DPC. After three lengthy public hearings, the DPC concluded that the Project was inconsistent with the Delta Protection Act and the Delta Plan in several respects, set forth below, and voted on February 22, 2007 to remand the Old Sugar Mill Project to Yolo County for reconsideration.

On January 28, 2008, the Yolo County Planning Commission recommended that the Board of Supervisors approve a "revised" Old Sugar Mill Project, together with a short addendum to the Project's environmental impact report ("EIR"). The revised Projects calls for fewer residential units than the original Project – 123 units rather than 162 – but in every other significant respect the revised Project is essentially the same as the original Project. *See* County of Yolo Planning Commission Staff Report (Jan. 24, 2008) ("Staff Rpt.").

II. The Revised Old Sugar Mill Project Remains Inconsistent with the Delta Protection Act and the Delta Plan.

The Delta Protection Act reflects the Legislature's judgment that "the [D]elta is inherently a floodprone area wherein the most appropriate land uses are agriculture, wildlife habitat, and, where specifically provided, recreational activities." Pub. Res. Code § 29704. The Legislature's judgment in this regard is shared by the Governor's Delta Blue Ribbon Task Force, which recently issued a report that concludes:

[T]he Delta floodplains are a fundamentally unsafe place for housing even with new investments in levees. . . . It is irresponsible to make land-use decisions that permit and encourage construction of significant numbers of new residences in the Delta in the face of the flood hazards that unquestionably exist there. . . . The impacts of climate change – especially rising sea level and increased precipitation runoff patterns – will only exacerbate future threats to public safety associated with such development in the Delta.

Delta Vision (Attachment 1 hereto) at 18 (emphasis added). An October 15, 2007 report from an Independent Review Panel to the Department of Water Resources similarly urges California to "provide comprehensive protection to those now living behind levees . . . and restrict future development in hazardous areas." A California Challenge (Attachment 2) at iv-v. The Review Panel warned that "[a]dditional development in these areas will simply put more people at risk and create an ever-escalating demand for additional flood damage reduction structures with high economic, societal, and environmental costs." *Id*.

It is precisely because the Delta is so inherently unstable and floodprone that the Delta Protection Act prohibits new development in the Primary Zone that would "expose the public to increased flood hazard." Pub. Res. Code § 29763.5(g). To this end, Levee Policy 3 in the Delta Plan directs local governments to "carefully and prudently carry out their responsibilities to regulate new construction within flood hazard areas to protect public health, safety and welfare." 14 Cal. Code Regs. § 20100(c). Along similar lines, the Plan's Land Use Policy 4 specifies that "[n]ew non-agricultural residential development, if needed, shall be located within the existing Primary Zone communities where support infrastructure and flood protection are already provided." 14 Cal. Code Regs. § 20060(d).

The DPC found that the original Old Sugar Mill Project would expose the public to increased flood hazard, in violation of Levee Policy 3 and Land Use Policy 4. In reaching this conclusion, the DPC noted the following:

- "Flood protection for the project area is uncertain and may be below a 100-year level."
- "[The project] would result in a density significantly greater than the existing community and greater than the standard density for this type of area, thus reducing the level of public health and safety by inducing growth in the area."
- "The residences may be constructed [under the proposal] even though levee improvements that may be required to provide adequate flood protection may not occur due to infeasibility."

Staff Rpt. at 70-74 (setting forth the DPC's findings).

The revised Old Sugar Mill Project contains no modifications that could alter these findings. The agricultural levees that surround the project site still have not been certified as providing 100-year protection, and the Planning Commission acknowledges that the risk of levee failure remains "significant and unavoidable." Staff Rept. at 34 (emphasis added). The revised Project still would result in a density significantly greater than the existing community of Clarksburg, as the Planning Commission also recognizes. See id. at 11. And, as was the case with the original Project, construction of the revised Project still may proceed even if levee improvements that may be required to provide adequate flood protection are dismissed by the developer as infeasible. *Id.* at 9.

The Planning Commission's argument to the contrary is unpersuasive. The "three changes" to the Project it claims "address the DPC's concerns" are changes without significance. *See* Staff Rpt. at 8. First, the Planning Commission notes that Mitigation Measure 4.7.7a has been revised so that "all new residences will be built with living areas elevated one foot above the 100-year base flood elevation, assuming no levee protection." *Id.* Previously, Mitigation Measure 4.7.7a required that "[h]abitable areas of all residential units shall be constructed with

the floor level one foot above the base flood elevation (BFE) *or* one foot above the highest expected flood elevation (determined by Wood Rodgers to be 4.0 feet), whichever is greater at the time a residential building permit is issued." Staff Rpt. at 32 (emphasis added). But dropping the alternative to the BFE-based requirement in the original mitigation measure makes no practical difference. As the Planning Commission acknowledges, "FEMA still has not established a BFE for the project site," and while the Commission now "believes that a determination of BFE for the project site is forthcoming in the near future," it remains unlikely that FEMA will act prior to the issuance of building permits. *Id.* at 33. In the event FEMA has not established the BFE, the revised Mitigation Measure states that "a BFE will need to be established by a registered professional engineer." *Id.* at 34. The Planning Commission's "unofficial estimate" is that the BFE will be determined to be between 10 and 13 feet; however, revised Mitigation Measure 4.7.7a in no way commits to this unofficial estimate. Instead, as was the case with the original Project, registered professional engineers (perhaps from Wood Rodgers Inc.) may very well arrive at a 100-year BFE that is decidedly below the 100-year BFE that FEMA ultimately establishes.

Moreover, the Department of Water Resources has concluded that even "[o]ne hundred year protection is not an acceptable level of protection for urban areas." A California Challenge (Attachment 2) at v. As discussed in Section III below, global warming is already increasing both the frequency and magnitude of flooding in the Delta. In recognition of this reality, recently enacted Senate Bill 5 (Machado) will require that local governments guarantee at least 200-year flood protection for residential areas in the future. Finally, the Planning Commission fails entirely to address the medical emergency, evacuation and other safety issues that would confront residents stranded in their homes above high flood waters near strong river currents.

The second "change" upon which the Planning Commission relies is that "the number of homes built in connection with the project is proposed to be reduced." Staff Rpt. at 8. However, the 123 residences that are currently proposed would still nearly double the existing town of Clarksburg, and the Planning Commission concedes that the revised Project would be nearly 50% more dense than the surrounding community. Staff Rpt. at 11. Nor has the Planning Commission presented any evidence that 123 additional non-agricultural residences are "needed," as required by Land Use Policy 4. As the DPC noted in its remand order: "Significantly, the General Plan Housing Element predicts that an additional 27 housing units will be needed . . . by the year 2020." *Id.* at 71. This estimate was made in August 2004. *Id.* The Planning Commission has offered no explanation as to why, just a few years later, the community suddenly "needs" four and a half times more housing. Contrary to the Delta Protection Act and the Delta Plan, the revised Old Sugar Mill Project continues to, as concluded

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¹ The guiding principle of minimal residential growth for the area is echoed throughout the 1982 General Plan. *See*, *e.g*, 1982 Clarksburg General Plan at ii ("Faced with the potential problems that would come with growth, this community has determined to stabilize its size and configuration to present standards."); *id* at III-1 ("This Plan provides policies that will allow only replacement and infill of commercial and residential uses. No significant rise in density or population numbers will result.").

by the DPC with respect to the original Project, "include[] a change in zoning from Heavy Industrial to a residential use that would result in a density significantly greater than the existing community and greater than the standard for the county for this type of area, thus reducing the level of public health and safety by inducing growth in the area." *Id.* at 73.

Finally, the Planning Commission states that "provisions of the Development Agreement relating to future geotechnical investigations have been revised to include new consultation and best evidence requirements." *Id.* at 9. But the Commission acknowledges that, regardless of the results of any future geotechnical investigations, the revised Development Agreement still requires the developer to perform only those levee improvements that the developer unilaterally deems "feasible." *Id.* Again, as the DPC found with respect to the original Old Sugar Mill Project, "[t]he residences may be constructed even though levee improvements that may be required to provide adequate flood protection may not occur due to infeasibility." *Id.* at 71.

In short, the revised Old Sugar Mill does not address the DPC's concerns regarding levee failure and catastrophic flooding and remains contrary to the Delta Protection Act and Delta Plan, as the Planning Commission ultimately admits. While the Delta Protection Act explicitly prohibits new development in the Primary Zone that would "expose the public to increased flood hazard," Pub. Res. Code § 29763.5(g), the Planning Commission concedes that:

As with the original project, even as revised, the proposed project . . . may expose people and new structures to a significant risk of loss, injury, or death from deep flooding as a result of potential levee failure.

Staff Rpt. at 13 (emphasis added).

III. The Environmental Review for the Old Sugar Mill Project Fails to Address the Fact that Floods Are Becoming More Frequent and Severe Due to Global Warming.

Common sense dictates that any analysis of the consistency of the Old Sugar Mill Project with the Delta Protection Act and the Delta Plan should take into account the fact that catastrophic floods are becoming more frequent and severe due to global warming. However, the Planning Commission concedes that this critical topic was not examined *at all* in the

² NRDC has long urged the Board of Supervisors to consider global warming's impact on flood risk. *See*, *e.g.*, Letter from Katherine S. Poole to Yolo Co. Bd. of Supervisors (July 24, 2006) at 2 (advising the County that "[c]hanging patterns and sea level rise currently anticipated as a result of climate change impacts on the Delta will worsen the existing flood danger" and recommending that "climate change threats must be fully assessed before new residential development can be considered safe"); Letter from Trent W. Orr to Yolo Co. Bd. of Supervisors (Oct. 20, 2006) at 2 (noting that global warming "does not seem to have been examined in any depth, if at all, in the EIR or supporting documentation" and urging the County to consider several specific reports "that describe the increased risks that global climate change portends for the Delta").

environmental impact report ("EIR") for the Project. *See* Staff Rpt. at 39 ("Global climate change was not specifically studied in the EIR.").

In its recent addendum to the Project EIR, the Planning Commission recognizes that flooding "could be exacerbated or otherwise affected by global climate change." Staff Rpt. at 39. The Commission's sole excuse for failing to consider this very real impact is that it is "difficult to assess the potential effects of global climate change on the frequency or magnitude of flood events and related infrastructure concerns." *Id.* at 41. According to the Planning Commission:

In the absence of some specific information about potential changes in the frequency and magnitude of flood events in the vicinity of the Project site associated with global climate change, the County has no basis for concluding . . . that future inhabitants of the Project will be exposed to substantially more severe flood risks as a consequence of global climate change.

Id. at 44. The Planning Commission's dismissal of this important health and safety issue not only makes for extremely dangerous public policy, but is also legally inadequate under the California Environmental Quality Act ("CEQA").³

Certainly CEQA "do[es] not require prophecy," and agencies need not "predict precisely what the environmental effects, if any, of future [events] will be." *Laurel Heights Improvement Ass'n v. Regents of Univ. of Cal.* (1988) 47 Cal. 3d 376, 398. Nevertheless, the California Supreme Court has held that "[t]he fact that precision may not be possible . . . does not mean that no analysis is required." Id. at 399. The Supreme Court has made clear there is "no authority that exempts an agency from complying with the law, environmental or otherwise, merely because the agency's task may be difficult." *Id.* at 399. To the contrary, the CEQA Guidelines specify:

Drafting an EIR or preparing a negative declaration necessarily involves some degree of forecasting. While foreseeing the unforeseeable is not possible, an agency must use its best efforts to find out and disclose all that it reasonably can.

14 Cal. Code Regs. § 15144 (emphasis added). The CEQA Guidelines are explicit that an agency may not simply dismiss an impact as "speculative" until it has undertaken a "thorough investigation." 14 Cal. Code Regs. § 15145. Thus:

³ The Planning Commission is incorrect that the Old Sugar Mill Project EIR is "legally valid for all of its intended purposes." Staff Rpt. at 40. Pursuant to the Delta Protection Act, the Project and the associated EIR are not effective until the DPC determines that the Project is consistent with the Delta Protection Act and the Delta Plan. *See* Pub. Res. Code § 29771.

The fact that a single methodology does not currently exist that would provide the [agency] with a precise, or 'universally accepted,' quantification of the human health risk . . . does not excuse the preparation of any health risk assessment – it requires the [agency] to do the necessary work to educate itself about the different methodologies that are available.

Berkeley Keep Jets Over the Bay Comm. v. Bd. of Port Comm'rs (2001) 91 Cal. App. 4th 1344, 1370.

While there may not be "specific information" about the precise impact that global warming will have "in the vicinity of the Project site," as the Planning Commission maintains, the County "can surely make informed judgments" about global warming's probable effect based on a wealth of existing studies and widely accepted methodologies. *Laurel Heights Improvement Ass'n*, 47 Cal. 3d at 399.

To begin with, it is undisputed among scientists that rising global temperatures – even modest increases of 2°C per century – will "reduce the volume of snowpack, contributing to higher flood peaks during the rainy season" in the Delta. *See* Knowles and Cayan 2002 (Attachment 3) at 38-1. *See also* Barnett et al. 2008; Kerr 2007; Hayhoe et al. 2004 (Attachments 4-6). Sierra snowpack serves as an enormous reservoir, delaying the release of up to 40% of the annual water supply for California until after April 1. In a 2006 study, the California Department of Water Resources ("DWR") demonstrated that global warming-induced runoff from the Sierra into the Delta has already significantly increased over the last 100 years. *See* Progress on Incorporating Climate Change into the Management of California's Water Resources (Attachment 7) at 2-22. At current rates of global warming, scientists estimate that by 2060, 2.5 million acre-feet of water will be prematurely released from the Sierra Nevada mountains. *See* Knowles and Cayan 2002 (Attachment 3).

It is equally well established that global warming is also causing and will continue to cause sea level rise. *See, e.g.*, Intergovernmental Panel on Climate Change 2007; California Climate Change Center 2006 (Attachments 8-9). DWR has determined that "[t]here is a possible range of sea level rise of from 0.7 to 4.6 feet over the next 100 years, depending upon the assumed future greenhouse gas emissions and the forecast model used." Draft State Water Project Reliability ("SWP") Report (Attachment 10) at 21. "The CALFED Independent Science Board has recommended that for planning purposes incorporating sea level rise, we should use the full range of variability of 50-140 cm " – *i.e.*, 1.7 to 4.6 feet. *Id.* at 21-22. Sea level rise increases the force on levees in two ways: "first, the higher the sea level the higher the water pressure against the base of the levee, and second, the higher the sea level the larger the levee areas experiencing elevated water pressure." California Climate Change Center (Attachment 8) at 38.

Given that global warming is causing both greater runoff flows from the Sierra into the Delta and rising mean sea levels intruding into the Delta, scientists and expert agencies have projected that flood events in the Delta will become increasingly frequent and severe. The Delta Risk Management Strategy ("DRMS") Project expects "Delta flood hazard[s] . . to increase 200% due to sea level rise and more frequent high flows." SWP Report (Attachment 10) at 21. The DRMS Project report concludes that a "medium expectation" is that "a flood that can now be expected to occur about once in 100 years can be expected to occur once in about 67 years by 2050." DRMS Phase 1 Risk Analysis Draft (Attachment 11) at 14-4. *See also* Mount and Twiss (2005) (Attachment 12) (calculating a "2 in 5" chance of a 100-year flood event occurring in the Delta in the next 50 years). Indeed, a recent report from an Independent Review Panel to DWR entitled "A California Challenge – Flooding in the Central Valley" warns that the increased probability of a 100-year flood event due to global warming is such that an the definitions of 100-year and 500-year flood events may soon "lose their meaning" and effectiveness as management tools. A California Challenge (Attachment 2) at 7.

In short, while there are of course varying estimates regarding the precise degree to which global warming will increase Delta flooding, there is broad consensus that Delta flooding will increase significantly over today's baseline. Accordingly, agencies at every level of government are calculating increased flooding risks into their land management decisions. Thus the DWR's Independent Review Panel emphasizes: "Planning and project decisions and calculations of risks *must take into account* these possible changes." *Id.* at 26 (emphasis added). Ignoring global warming only increases the likelihood that levee failures and resultant flooding will result in severe human injury and loss of life, infrastructure damage, loss of productive farmland, and other damages. In recognition of this fact, the State Legislature has directed agencies and local governments to plan for global warming. For example, Senate Bill 17 (Florez) requires the Central Valley Flood Protection Board (formerly, the Reclamation Board) to assess the impacts of climate change before issuing a flood permit. See Water Code § 8610.5. Along the same lines, Senate Bill 5 (Machado), adopted in October 2007, will require local governments to provide 200-year flood protection for new residential areas – taking the conservative approach that is the only responsible reaction to the mounting proof of global warming impacts on the Delta.

As stated by the U.S. Army Corps of Engineers:

We have a professional and ethical obligation to [assess] our projects to ensure that they are correctly designed, constructed and maintained . . . to compensate for subsidence/sea level rise in order to provide appropriate flood . . . protection.

Army Corps of Engineers Memorandum (Attachment 13) at 1. Unfortunately, here the County has not undertaken a "reasonably conscientious effort . . . either to collect additional data or to make further inquiries of environmental or regulatory agencies having expertise in the matter." *Berkeley Keep Jets Over the Bay Comm.*, 91 Cal. App. 4th at 1370. The County's decision to

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dismiss global warming impacts out of hand because they are too "difficult to assess" falls far short of what is required under CEOA.

IV. Conclusion

The revised Old Sugar Mill Project will expose the public to increased risks from flooding and remains inconsistent with the Delta Protection Act and the Delta Plan. In addition, the environmental review that has been prepared for the Old Sugar Mill Project fails entirely to address the fact that Delta flood events are becoming more frequent and severe due to global warming and analyze how that fact could impact the Project. For these reasons, NRDC strongly urges the Board of Supervisors not to approve the revised Old Sugar Mill Project as it is currently proposed.

Sincerety,

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Research Associate

Attachments

cc: (without attachments)

Chair & Members of the Yolo County Board of Supervisors
David Morrison, Assistant Director, Planning and Public Works Department
Phil Pogledich, Senior Deputy County Counsel
Linda Fiack, Delta Protection Commission
Daniel Siegel, Deputy Attorney General
Timothy Taron, Hefner Stark & Marois LLP

LIST OF ATTACHMENTS

- 1. Blue Ribbon Task Force 2008. Our Vision for the California Delta. January 29, 2008.
- 2. Independent Review Panel 2007. A California Challenge-Flooding in the Central Valley. A Report to the Department of Water Resources, State of California. October 15, 2007.
- 3. Knowles, N. and Cayan, D.R. 2002. Potential Effects of Global Warming on the Sacramento/San Joaquin watershed and the San Francisco Estuary. *Geophysical Research Letters*, vol. 29, no. 18, pgs.38-1-4. September 28, 2002.
- 4. Barnett. T.P. et al. Human-Induced Changes in the hydrology of the Western United States. *Sciencexpress*. January 31, 2008.
- 5. Kerr, R.A. 2007. Global Warming Coming Home to Roost in the American West. *Science*, vol 318, pg. 1859. December 21, 2007.
- 6. Hayhoe, K., et al. 2004. Emissions Pathways, Climate Change, and Impacts on California. *Proceedings of the National Academy of Sciences*, vol. 101, no. 34, pgs. 12422-12427.
- 7. Department of Water Resources 2006. Progress of Incorporating Climate Change into Management of California's Water Resources, Technical Memorandum Report. State of California.
- 8. Intergovernmental Panel on Climate Change. 4th Assessment Report, Climate Change 2007: Synthesis Report
- 9. California Climate Change Center. Projecting Future Sea Level Rise, State of California. White Paper CEC-500-2005-202-SF. March 2006.
- 10. The State Water Project Delivery Reliability Report Draft December 2007. State of California Department of Water Resources.
- 11. Delta Risk Management Strategy Project. URS and JBA. 2007. Risk Analysis Report. Draft. June, 26, 2007.
- 12. Mount, J. and Twiss, R. 2005. Subsidence, Sea Level Rise, and Seismicity in the Sacramento-San Joaquin Delta. San Francisco Estuary and Watershed Science, vol. 3, iss. 1. March 2005.
- 13. U.S. Army Corps of Engineers, Memorandum for Major Subordinate Commands, December 4, 2006